DIAMOND® BY TIMKEN

DIAMOND® 300 SERIES STAINLESS STEEL CHAIN KEEPS DOUGHNUTS AFLOAT

CHALLENGE ▼

A national snack food manufacturer was looking for a service life upgrade for its roller chain with attachments. The roller chain was used in a fryer application, which attached to a wire belt that travelled through hot oil, ensuring that doughnuts travelled from the batter dispenser through the frying process without sinking to the bottom of the fryer trough.

TIMKEN SOLUTION ▼

The snack food manufacturer selected Diamond's 300 series stainless steel roller chain as the solution for this application. 300 series is an ideal solution for food handling purposes in that it provides excellent corrosion resistance, has very low magnetic permeability and is considered non-sparking, which is especially important when working with oil in fryer applications.

Although initially considered a concern, lubrication turned out to be an insignificant issue. Traditionally, a mineral oil based lubricant is used for chain in food applications, but this wasn't an option due to contact with the oil. Instead, the hot oil from the fryer acted as the chain's lubricant, while an oil filtering system ensured that contaminants were removed from the frying trough in order to prevent contamination and buildup in the chain's pin and bushing area.

RESULTS THAT MATTER ▼

With a switch to Diamond's 300 series stainless steel roller chain, this manufacturer would see an increase of six weeks of service life in addition to purchase cost savings of $3,500 per year.

Chain Life
+6 Weeks
Annual Savings
$3,500

The Timken team applies their know-how to improve the reliability and performance of machinery in diverse markets worldwide. The company designs, makes and markets high-performance mechanical components, including bearings, belts, brakes, clutches, chain, couplings, gears and related mechanical power transmission products and services.

Stronger. By Design.